Windows **P**hone 7

Understanding **W**indows **P**hone **7** **P**latform

i'm :
Ali Mustafa

Products Unit Manager

work @ :
Masader **T**ech.
in **J**ordan

/ali.m.nimer

ME

@alinimer

1	New Experience and Philosophy
Application Platform Overview	**2**
3	Windows Phone Market Place
Resources	**4**
5	Demo: Create Your First WP7 App
Q & A	**6**

Agenda

New **E**xperience **a**nd **P**hilosophy

Smart Design

Integrated Experiences

Your **E**xperience

The Windows Phone Design System Codename "Metro"

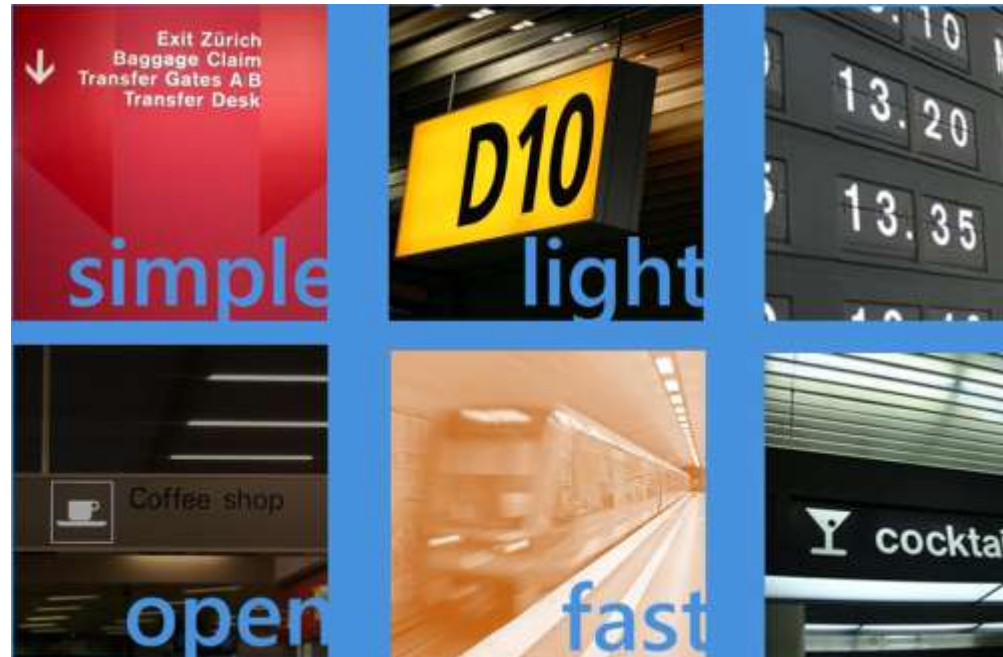**Metro :** is the name of the new design language created for the Windows Phone 7 interface

Principles of Design:
Typography
Motion
Content not Chrome
Honesty

Integrated **E**xperiences

Integrated Experiences

PEOPLE →

OFFICE →

PICTURES

MUSIC+VIDEO

MARKETPLACE

GAMES →
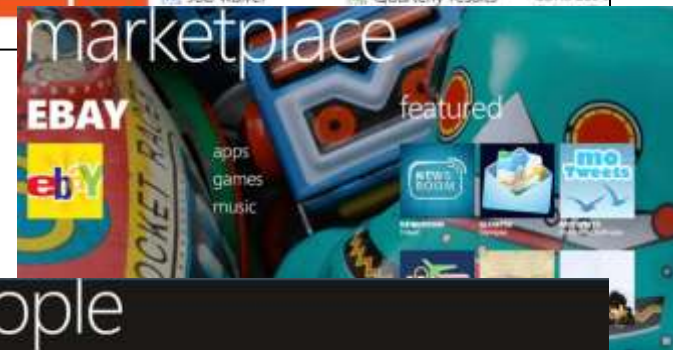
Pages **D**esign **T**ype
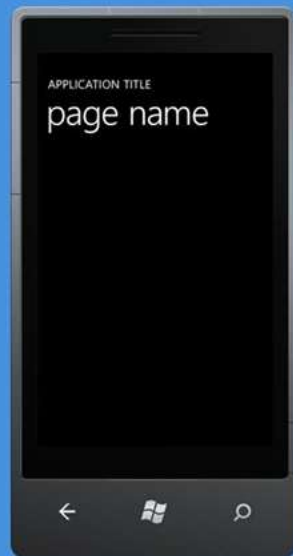
portrait landscape panorama pivot

APPLICATION TITLE
page name

Pages **D**esign **T**ype

portrait **landscape** panorama pivot

APPLICATION TITLE
page name

Pages **D**esign **T**ype

Pages **D**esign **T**ype

portrait landscape panorama pivot

APPLICATION TITLE
pivot1 pivot2 piv

Hardware

Windows Phone Hardware	**=**	Common Hardware Elements	**+**	Consistent Platform	**+**	Quality Focus

Consistent set of hardware capabilities defined by Microsoft

One resolution at launch

Consistent cap-touch input

Consistent processor / GPU

Same available RAM

Optional keyboard

CPU
1 GHz

GPU
DirectX 9

Memory
256 MB RAM
8 GB Flash

Camera
5MP

Sensors
A-GPS
Accelerometer
Compass
Light
Proximity

800
3.7 - 4.3
480

Screen Components
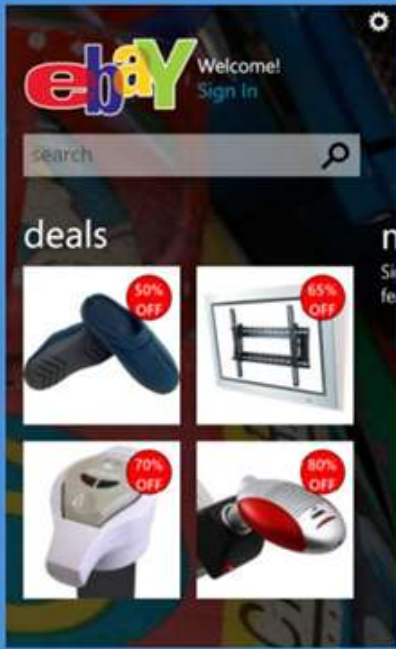
Application **P**latform

Help end users personalize their phones

Help developers be profitable
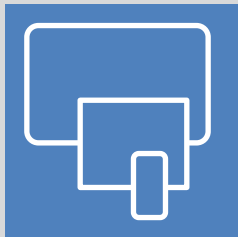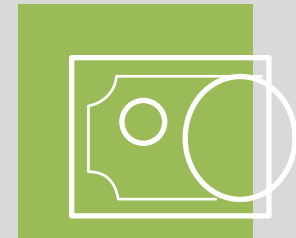
Enable cloud powered experiences

Elements of the Application Platform

Runtime – On "Screen"
Code you write on the client

SCREEN

Tools & Support
Tools you use to design & develop

CLOUD

Cloud Services
Code you write on the server

Developer Portal Services
Tools you use to ship & sell

Elements **o**f **t**he **A**pplication **P**latform

Runtime – On "Screen"

Microsoft Silverlight | xna

| Sensors | Media | Data | Location |
| Phone | Xbox LIVE | | Notifications |

.NET Framework managed code sandbox

Windows Phone | XBOX | Windows 7

Tools

Microsoft Visual Studio | Microsoft Expression Blend

Phone Emulator	xna Game Studio
Samples	Documentation
Guides	Community

Packaging and Verification Tools

SCREEN

CLOUD

Cloud Services

Notifications	App Deployment	
Location	Identity	Feeds
XBOX LIVE	Social	Maps

Windows Azure

Portal Services

Registration	Marketplace
Validation	MO and CC Billing
Certification	Business Intelligence
Publishing	Update Management

Cloud Services

SCREEN

CLOUD

Cloud Services

Notifications	App Deployment	
Location	Identity	Feeds
XBOX LIVE	Social	Maps

Windows Azure

Code you write on
the server

Cloud Services

Windows Phone

Windows Phone Application

Frameworks

Cloud integration client services

Your Web Service

Custom Web Service

Existing Web Services

facebook

Microsoft Services

Windows Live   bing   XBOX LIVE

Windows Phone 7 Series
Location Service

Windows Phone 7 Series
Notification Service

Location **S**ervice

GPS

+ Accuracy
- Power
- Speed
- Indoors

- Accuracy
+ Power
+ Speed
- Wilderness

Cell towers

WiFi

- Accuracy
+/- Power
+/- Speed
+/- Urban areas
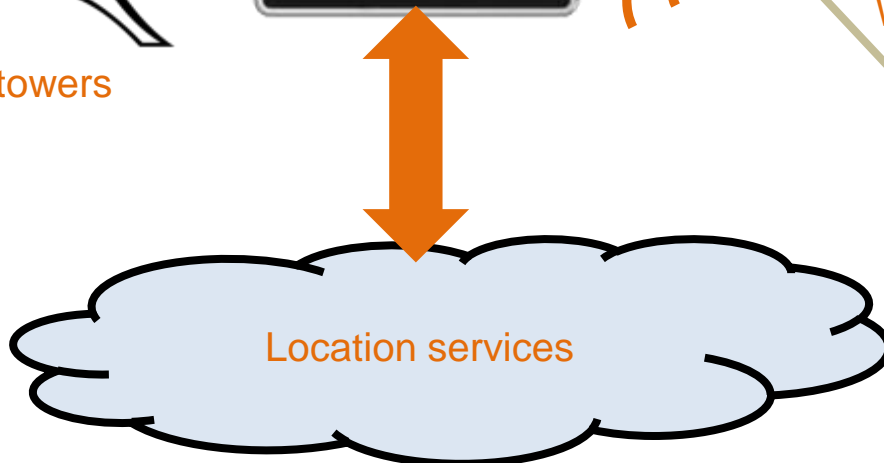
Location services

Client **R**untime & **F**rameworks

Runtime – On "Screen"

Microsoft Silverlight		xna	
Sensors	Media	Data	Location
Phone	Xbox LIVE		Notifications

.NET Framework managed code sandbox

Windows Phone   XBOX   Windows 7

SCREEN

CLOUD

Code you write on the client

Two **F**lavors **o**f **A**pplications

- Modern application UI framework

- Rapid creation of visually stunning apps

- Metro-themed UI controls

- High performance game framework

- Rapid creation of multi-screen 2D and 3D games

- Rich content pipeline

Windows Phone Frameworks

Sensors | FMRadio | Camera | Device Integration | Launchers & Choosers | Bing MapControl

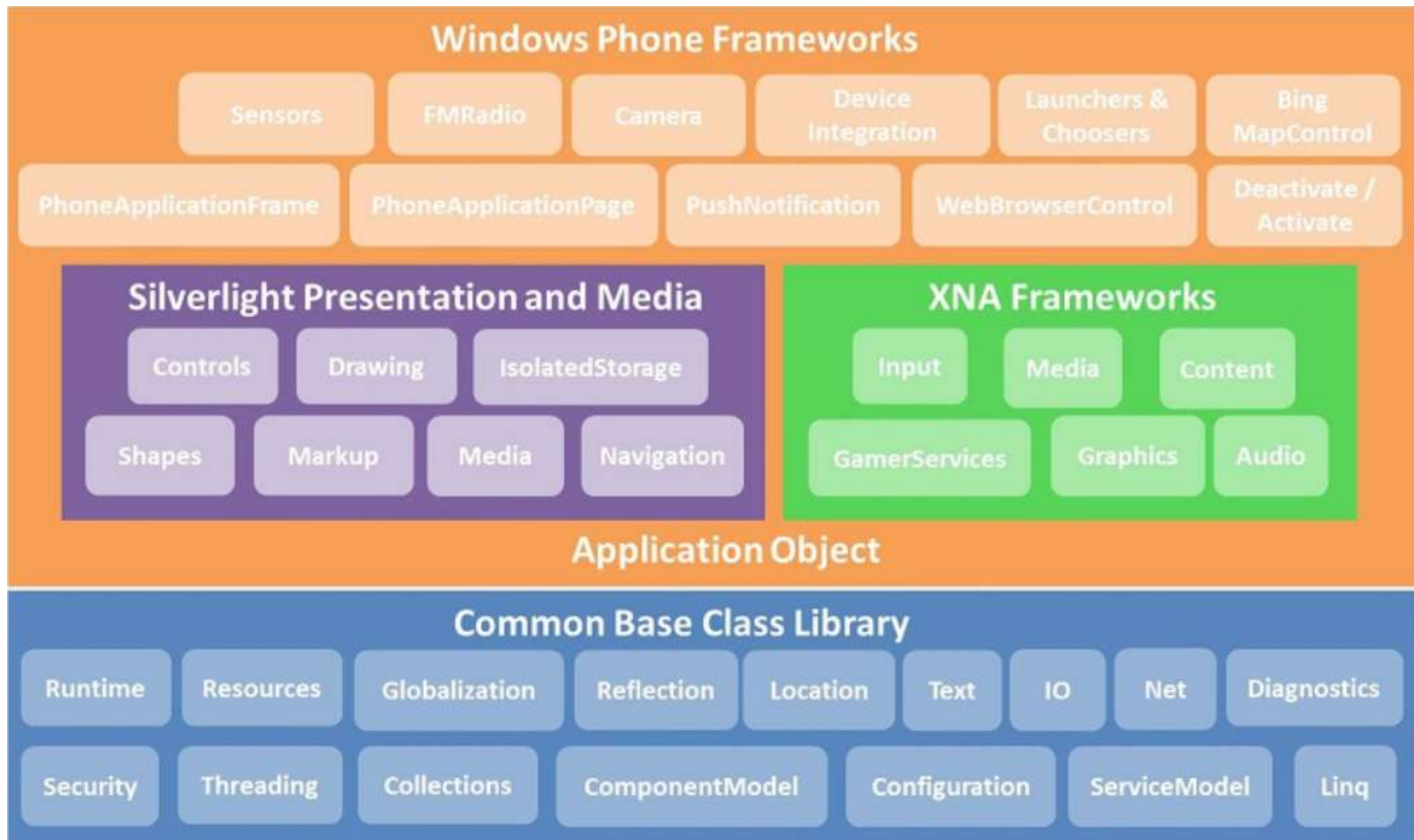PhoneApplicationFrame | PhoneApplicationPage | PushNotification | WebBrowserControl | Deactivate / Activate

Silverlight Presentation and Media

Controls | Drawing | IsolatedStorage

Shapes | Markup | Media | Navigation

XNA Frameworks

Input | Media | Content

GamerServices | Graphics | Audio

Application Object

Common Base Class Library

Runtime | Resources | Globalization | Reflection | Location | Text | IO | Net | Diagnostics

Security | Threading | Collections | ComponentModel | Configuration | ServiceModel | Linq

Choosing the Right Technology

Graphics
- UI based on control interaction
- **Rich** vector graphics through XAML

Media
- Rich video support

Tooling
- Microsoft Blend & VS2010 Designer

Choosing the Right Technology

Graphics

3D Graphics

2D Sprites

Simulation/Drawing

Traditional Update/Draw/Present frame loop

Tooling

XNA Framework Content Pipeline

Common Capabilities

Input

- Touch
- Hardware buttons

Media

- Digital media capture & playback
- Media library access

Data

- Isolated Storage
- LINQ (Objects and XML)

.NET

- Superset of Silverlight 4.0
- Windows Communication Foundation: SOAP and REST services

Phone Access

- Sensors
- Launchers & Choosers
- Camera

Integrated With Cloud Services

- Notifications
- Location
- Xbox LIVE

Application Model Life Cycle

Application
Uniquely identifiable, licensable and serviceable software product packaged as a XAP

Application Deployment
Validation, Certification, and Signing

Microsoft Visual Studio

Microsoft Expression Blend

xna | Game Studio

Windows
Phone
Marketplace

Application license
Crypto-verifiable object issued to grant rights to an application

Windows
Phone
Marketplace

Windows **P**hone **D**eveloper **T**ools

Tools you use to Design & Develop

Tools

Microsoft Visual Studio   Microsoft Expression Blend

Phone Emulator	xna Game Studio
Samples	Documentation
Guides	Community
Packaging and Verification Tools	

SCREEN

CLOUD

Getting Windows Phone Developer Tools

Windows Phone SDK 7.1

- Microsoft Visual Studio 2010 Express for Windows Phone

- Windows Phone Emulator

- Windows Phone SDK 7.1 Assemblies

- Silverlight 4 SDK and DRT

- Windows Phone SDK 7.1 Extensions for XNA Game Studio 4.0

- Microsoft Expression Blend SDK for Windows Phone 7

- Microsoft Expression Blend SDK for Windows Phone OS 7.1

- WCF Data Services Client for Window Phone

- Microsoft Advertising SDK for Windows Phone

Software Requirements

- Windows Vista (x86 and x64) with Service Pack 2 – all editions except Starter Edition

- Windows 7 (x86 and x64) – all editions except Starter Edition

Hardware Requirements

- Installation requires 4 GB of free disk space on the system drive

- 3 GB RAM

- Windows Phone Emulator requires a DirectX 10 capable graphics card with a WDDM 1.1 driver

- Windows Phone SDK 7.1 is compatible with the final version of Visual Studio 2010 SP1

http://create.msdn.com/en-us/home/getting_started

Application **T**esting

myapp.xap
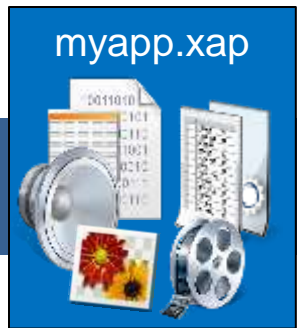
Windows Phone device

Windows Phone Emulator

Packaging & Verification Tools

.xap

dll

Developer **P**ortal **S**ervices

SCREEN

CLOUD

Tools you use to
ship & sell

Portal Services

Registration	Marketplace
Validation	MO and CC Billing
Certification	Business Intelligence
Publishing	Update Management

Developer **P**ortal

- → Learn,
- → Build,
- → Publish,
- → Earn.

http://create.msdn.com

Deployment **P**rocess

Develop & Debug → **Submit & Validate** → **Certify & Sign**

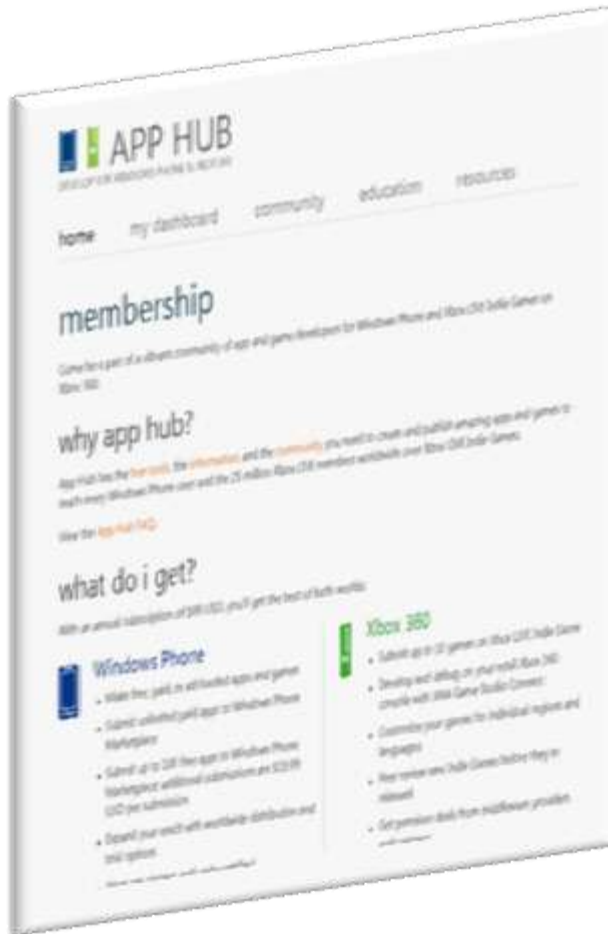**Windows Phone Application Deployment Service** → **Marketplace** →
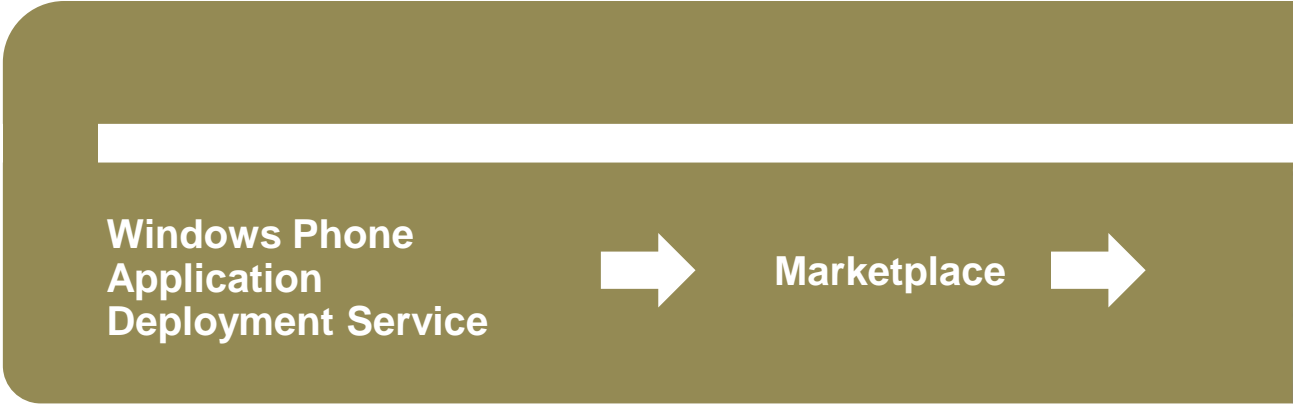
Windows **P**hone **M**arket **P**lace

- **Free Tools!**

- **$99 / year**

- **No limit for paid apps**

- **Free apps Limit submission**

   - App Hub: 100 (+$19.99)

   - Yalla Apps: 5 (+1 Credit)

- **Unlock Device**

Global
http://create.msdn.com/en-us/home/membership

Middle East, Africa or Latin America Region
http://www.yallaapps.com/

Resources

Get Started with Windows Phone Development
http://msdn.microsoft.com/en-us/ff380145

App Hub
http://create.msdn.com
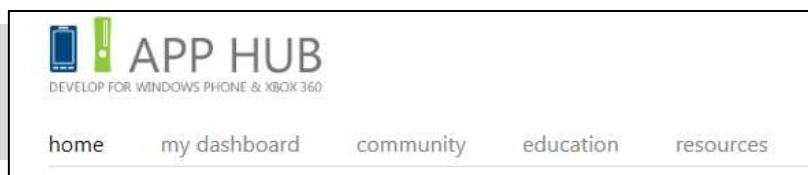
Microsoft Expression Community
http://expression.microsoft.com

MSDN Code Gallery
http://code.msdn.microsoft.com

Channel 9
http://channel9.msdn.com
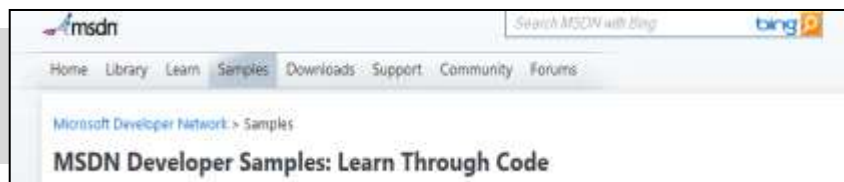
Create Your First WP7 Application ☺

Q & A
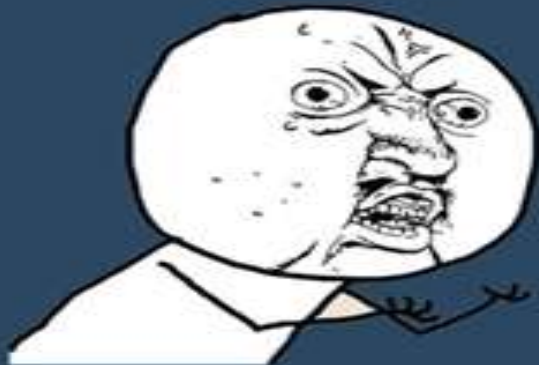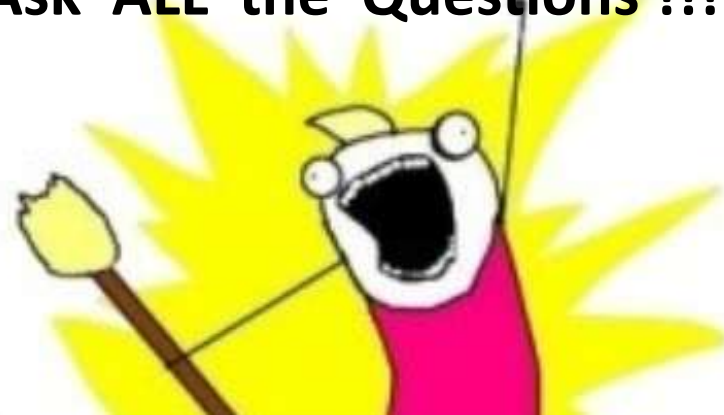
Windows **P**hone **7**

Understanding **W**indows **P**hone **7** **P**latform

Thanks All ☺
Ali Mustafa

Ali.Mustafa@Masader-Tech.com